REMARKS

Claims 1, 4-8, 10, 13-19, 22-28, 36, 38, 39, and 43-46 are pending in the application with claims 18, 38, and 43 amended herein.

Good and sufficient reasons exist why consideration of the remarks herein after final rejection should be granted at least because new claims 45 and 46 were first presented in a previous RCE and the final rejection of such claims herein is a new ground of rejection made final upon first action taken by the Office.

Previous amendments are objected to as introducing new matter into the disclosure by adding the limitation "less than 630°C." Also, claims 18, 19, 38, 39, 43, and 44 stand rejected under 35 USC 112, first paragraph, as containing subject matter not described in the specification for similar reasons. Applicants strongly disagree with the Office's refusal to abide by the current state of law by continuing the rejection of the subject claims. Merely to advance prosecution of the application and without admitting to the propriety of the objection/rejection, Applicants herein amend claims 18, 38, and 43 to set forth "less than 700°C." Applicants request withdrawal of the objection/rejection in the next Office Action.

Claims 45 and 46 stand rejected under 35 USC 102(e) as being anticipated by Vassiliev. Claims 1, 4-7, 10, 16-19, 36, 38, 39, 43 and 44 stand rejected under 35 USC 103(a) as being unpatentable over Vassiliev. Claim 8 stands rejected under 35 USC 103(a) as being unpatentable over Vassiliev in view of Homma. Claims 13-15 and 22-28 stand rejected under 35 USC 103(a) as being unpatentable over Vassiliev in view of Kirchhoff.

Applicants include herewith a declaration of prior invention pursuant to 37 CFR 1.131. Applicants assert that the declaration establishes conception of the invention prior to the effective date of Vassiliev relied upon by the Office in each of the novelty and obviousness rejections listed above. Applicants further assert that Vassiliev does not claim the subject matter of the claims pending in the current application at least because independent claims 1 and 9 of Vassiliev set forth a pressure of between about 200 and 260 Torr while the claims of the present application set forth a pressure of about 400 to about 760 Torr. The declaration is timely presented since the Office Action final rejection is a first rejection after filing of a RCE wherein new claims 45 and 46 were first presented. Thus, the final rejection of claims 45 and 46 is new ground of rejection made final upon first action taken by the Office.

Applicants herein provide adequate reasons for allowance of claims 1, 4-8, 10, 13-19, 22-28, 36, 38, 39, and 43-46 and request that all of such pending claims be allowed in the next Office Action.

Respectfully submitted,

Dated: 16 Dec 2002 By: _____

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/146,839
Filing Date ..... September 3, 1998
Inventor ..... Anand Srinivasan et al.
Assignee ..... Micron Technology, Inc.
Group Art Unit 2814
Examiner ..... A. Mai
Attorney's Docket No. MI22-1017
Title: Methods of Forming Fluorine Doped Insulating Materials

VERSION WITH MARKINGS TO SHOW CHANGES MADE ACCOMPANYING RESPONSE TO AUGUST 14, 2002 FINAL OFFICE ACTION

In the Claims

The claims have been amended as follows. Underlines indicate insertions and ~~strikeouts~~ indicate deletions.

18. (three times amended) A method of forming a silicon oxide having Si-F bonds, comprising:

providing a reaction chamber at a temperature in excess of 400 degrees Celsius (°C) but less than ~~630~~ 700°C;

positioning a substrate within the reaction chamber;

providing an ozone comprising reactant and a precursor having Si-F bonds to the substrate within the reaction chamber and maintaining a pressure within the reaction chamber of from about 400 Torr to about 1 atmosphere;

while providing the ozone comprising reactant and the precursor having Si-F bonds to the substrate, providing a plasma within the reaction chamber; and

causing a silicon oxide having Si-F bonds, to deposit onto the substrate within the reaction chamber at a rate of from about 1000 angstroms per minute (Å/min) to about 10000 Å/min.

38. (twice amended) The method of claim 18 comprising maintaining a temperature within the reaction chamber in excess of 500°C but less than ~~630~~ 700°C during the depositing.

43. (twice amended) The method of claim 18 comprising maintaining a temperature within the reaction chamber from about 500°C to about but less than ~~630~~ 700°C during the depositing.

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